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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,944	02/05/2004	John E. Kast	151P08970US02	5311

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EXAMINER

OROPEZA, FRANCES P

ART UNIT	PAPER NUMBER
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3766

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10/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/772,944	Applicant(s) KAST ET AL.	
	Examiner FRANCES P. OROPEZA	Art Unit 3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/31/08 (RCE) and 7/28/08 (Amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/31/08 has been entered.

2. The Applicant's comments filed in the response of 7/28/08 have been fully considered, but they are not convincing. The rejection of record is maintained, and the Applicant's comments are addressed below following the related rejection.

The double patenting rejection relative to U.S. Patent No. 6,505,077 to Kast et al. is withdrawn because the Applicant cancelled claim 22.

Claim Rejections - 35 USC § 103

3. Claims 1-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leysieffer (U.S. Patent No. 6,154,677).

As related to claims 1 and 2, Leysieffer substantially discloses the instant invention comprising an implantable medical device (54) adapted to be charged with an external recharging coil (106), the device comprising a housing (72) having an interior cavity, a proximal face, and an electrical feed-through, the hermetically sealed penetrations (108) are read as electrical/ recharge feed-through (col. 4 @ 56-60) on the

proximal face, electronics carried in the housing interior cavity, the electronics configured to perform a medical therapy (74), a rechargeable power source (90) carried in the housing interior cavity and electrically coupled to the electronics; and, a recharging coil (106) electrically coupled through the housing electrical feed-through (108) to the electronics and rechargeable power source (90) (Figures 1, 5; col. 4 @ 14-60).

As related to the recharging coil being centrally located and substantially carried on the housing proximal face, Leysieffer discloses the recharging coil is located on at least a part of the broad side of the housing (col. 7 @ 44-46). Absent any teachings of criticality or unexpected results, merely changing the location of the coil on the exterior face of the housing to a central location would be an obvious design choice, since the location change does not appear to provide an advantage over the prior art. (Instant application, page 2, lines 15-18 - “the recharging coil can either be carried on the proximal face... or detached ... and located remotely”).

The Applicant’s comments filed in the response of 7/28/08 have been fully considered, but they are not convincing.

The Applicant discusses on pages 6 to 8 of the 7/28/08 response the advantages of having the recharging coil centrally located on a proximal face of the housing. These comments however are not found in the instant specification, which supports the Examiner’s position that “lacking any teaching in the instant specification of criticality or unexpected results, merely changing the location of the coil on the exterior face of the housing to a central location would be an obvious design choice”. If placement of the recharging coil centrally on a proximal face of the housing was critical or if it provided

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unexpected results, it is maintained the Applicant's would have made this point the specification when the application was filed. Given the instant specification does not discuss the criticality of the placement of the recharging coil centrally on the proximal face of the housing, and does not discuss any unexpected result that are derived from placing the recharging coil centrally on the proximal face of the housing, it is accepted changing the location of the coil on the exterior face of the housing to a central location on the housing would be an obvious design choice.

The Applicant asserts Leysieffer teaches away from locating the recharging coil centrally on a proximal face of the housing. The Examiner respectfully disagrees. The Applicant cites an embodiment of the invention, figure 6, to support these arguments. Figures 5 and 6 are discussed together by Leysieffer (col. 5 @ 28-44), as figures 5 and 6 are identical embodiments of the invention, except figure 5 is a "flat face" version of the implanted device, where figure 6 is configured with the "reduced height section" such that the housing has a gradation. While it might be more difficult to place the recharging coil centrally on the proximal face of the housing when the housing has a gradation, it is maintained Leysieffer does not teach away from locating the recharging coil centrally on the proximal face of the housing. In the response of 7/28/08, the Applicant fails to acknowledge five additional embodiments of the invention taught by Leysieffer and shown in figures 1-3, 4, 7, 8 and 9. None of these embodiments has the "reduced height section" and gradation in the housing discussed by the Applicant, but rather all these embodiments having a "flat face" housing without gradations.

As relate to claims 3, 5, 8 and 10-13, the coil is connected mechanically tightly to the housing using polymer jacketing (104), read as the coil cover, and polymer over-molding, read as a means for attaching the recharge coil to the housing (col. 4 @ 42-53; col. 7 @ 20-23).

As related to claims 4, 6, 7 and 9, alignment details (poles) and attachment details are provided for the housing and coil cover (104) (col. 4 @ 14-19).

As related to claims 14, 15 and 18, the polymer jacketing is read as a retention sleeve that is hermetically sealed to the housing (col. 6 @ 2-4; col. 7 @ 20-23 and 27-28).

As related to claims 16 and 17, the power source is a rechargeable electrochemical battery (col. 4 @ 20-24).

As related to claim 19, the receiving coil can be a telemetry coil (col. 6 @ 51-57).

As related to claim 20, the implanted device is a pacemaker (col. 2 @ 10).

As related to claim 21, Leysieffer substantially discloses the instant invention comprising an implantable medical device (54) adapted to be charged with an external recharging coil (106), the device comprising a housing (72) having an interior cavity, a proximal face, and an electrical feed-through, the hermetically sealed penetrations (108) are read as electrical/ recharge feed-through (col. 4 @ 56-60) on the proximal face, electronics carried in the housing interior cavity, the electronics configured to perform a medical therapy (74), a rechargeable power source (90) carried in the housing interior cavity and electrically coupled to the electronics; a means for recharging, a recharging coil (106), electrically coupled through the housing electrical feed-through (108) to the electronics and rechargeable power source (90) (Figures 1, 5; col. 4 @ 14-60).

As related to the recharging coil being centrally located and substantially carried on the housing proximal face, Leysieffer discloses the recharging coil is located on at least a part of the broad side of the housing (col. 7 @ 44-46). Absent any teachings of criticality or unexpected results, merely changing the location of the coil on the exterior face of the housing to a central location would be an obvious design choice. (Instant application, page 2, lines 15-18 - “the recharging coil can either be carried on the proximal face... or detached ... and located remotely”)

As related to the means for attaching the means for recharging, Leysieffer discloses the coil is attached to the housing using alignment details (poles) and attachment details (col. 4 @ 14-19) and the coil is connected mechanically tightly to the housing using polymer jacketing (104) and polymer over-molding, read as a means for attaching the recharge coil to the housing (col. 4 @ 42-53; col. 7 @ 20-23).

4. Claim 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Leysieffer (US 6154677) in view of Baumann et al. (US 5279292).

As discussed in paragraph 4 of this action, Leysieffer discloses the claimed invention except for locating a telemetry coil in the interior cavity of the housing.

Baumann et al. teach an implantable device charging evaluation system using a telemetry circuit and associated coil mounted in the housing to provide information on the alignment of the transmitting coil relative to the receiving coil and/or on the charging state of the direct voltage source (col. 2 @ 5-10). It would have been obvious to one having ordinary skill in the art at the time of the invention to have used a telemetry coil and associated coil mounted in the housing in the Leysieffer system to optimize the

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efficiency and effectiveness of the recharging process and to ensure adequate power is maintain for successful operation of the device.

Statutory Basis

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fran Oropeza whose telephone number is (571) 272-4953. Fran's schedule typically is Monday and Tuesday 9AM-7PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl H. Layno can be reached on (571) 272-4949. Carl's schedule typically is Monday, Wednesday, Friday 9AM-5 PM EST; Tuesday, Thursday 9AM-3PM and 9PM-11PM EST. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and for After Final communications.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Frances P. Oropeza/
Patent Examiner, Art Unit 3766
September 30, 2008

/Carl H. Layno/
Supervisory Patent Examiner, Art Unit 3766